

King County Benchmarks

2004

Transportation

Highlights

Congestion Eases Slightly with Slow Economy: Single Occupant Auto Trips Still Dominate

Moving people, goods, and services throughout King County and around the Puget Sound region remains one of the greatest challenges of growth. This year's indicators reveal that even with a downturn in economic growth over the last three years, there have been only slight improvements in levels of congestion, and the single-occupant automobile remains the preferred mode of transportation to work.

- King County has a lower average commute time to work than many comparable metropolitan areas.
- Commute times appear to have decreased slightly over the last two years, but this may reflect a seasonal variation in measurement rather than a genuine improvement in commute conditions.
- Transit ridership is down by about 3.4% since 2001 and about 5% since 2000. The reason for this drop is almost certainly the increase in unemployment in the County during the 2000-2002 period.

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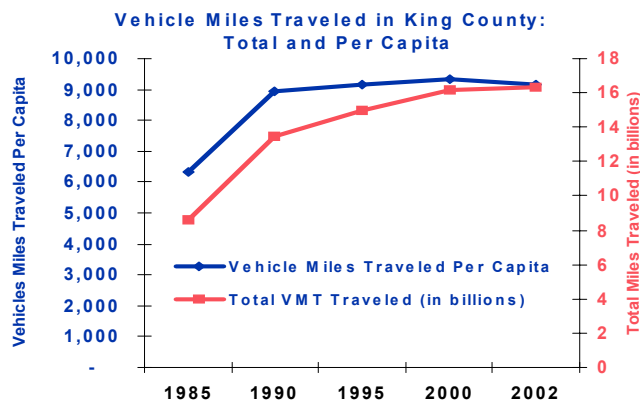
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As King County Grows, Miles on the Road Also Increase

Since 1995 the total number of vehicle miles traveled in King County has increased at just about the same pace as population growth. In other words, when the total number of miles is divided by the population, we are driving about the same amount per capita as in 1995 - about 9,200 miles per year.

The State Department of Transportation reports that while in 1995 a total of about 15 billion miles per year were driven on King County roads, in 2002, there were about 16.3 billion miles driven here. This is an increase of 8.3%. During this same period, population grew by about 8.0%.

A significant portion of traffic on major roads (5 - 10%) consists of trucks or other commercial vehicles. Both commercial traffic and commute traffic tend to be heavier during flush economic times, and drop slightly with higher unemployment.



The long term trends in King County indicate that both total miles and per capita miles increased rapidly during the late 1980s, while since the early 1990s, per capita miles traveled have leveled off.

But with more people living in the County, more vehicles are traveling more miles on our roads, even though each of us is driving about the same amount.

This presents the County with a critical dilemma. We can plan for ways to transport people and goods more efficiently. And we can find ways to bring people closer to their work and shopping. If nothing is done, we will pay the cost in congestion, loss of time, and harm to our air quality.

The following indicators measure how we are doing in these efforts.

Indicator Flags



There has been a long-term trend in a positive direction, or most recent data shows a marked improvement



There has been little significant movement in this Indicator, or the trend has been mixed



There has been a long-term negative trend, or the most recent data shows a significant downturn



There is insufficient reliable trend data for this Indicator

Outcome: Encourage linkages between residences, commercial centers and workplace locations

Indicator 41: Average Commute Lengths for Major Destinations in King County



Countywide Planning Policy Rationale

"Within the Urban Growth Area, growth should be directed as follows: a) first, to Centers and urbanized areas with existing infrastructure capacity; b) second, to areas which are already urbanized such that infrastructure improvements can be easily extended; and c) last, to areas requiring major infrastructure improvements." (LU-28)

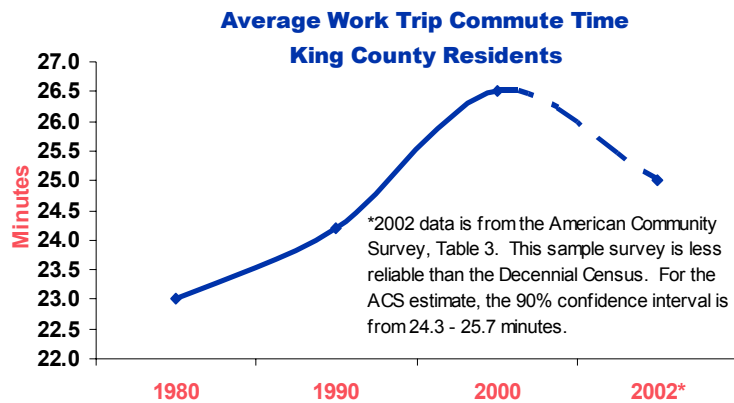
"The region's scarce resources for transportation capacity improvements must be used prudently to focus on areas where zoning and densities support a multi-modal transportation system....The land use pattern shall be supported by a balanced transportation system which provides for a variety of mobility options." (FW-18)

"Target ranges for employment growth inside and outside Urban Areas shall be based on the following criteria:...The willingness of local jurisdictions to implement policies which encourage transit...and the adoption of policies that encourage clustering of commercial and residential areas." (LU-68)

"Each [Urban] Center shall have planned land uses to accommodate...a minimum of 15,000 jobs within one half mile of a transit center."

Key Trends

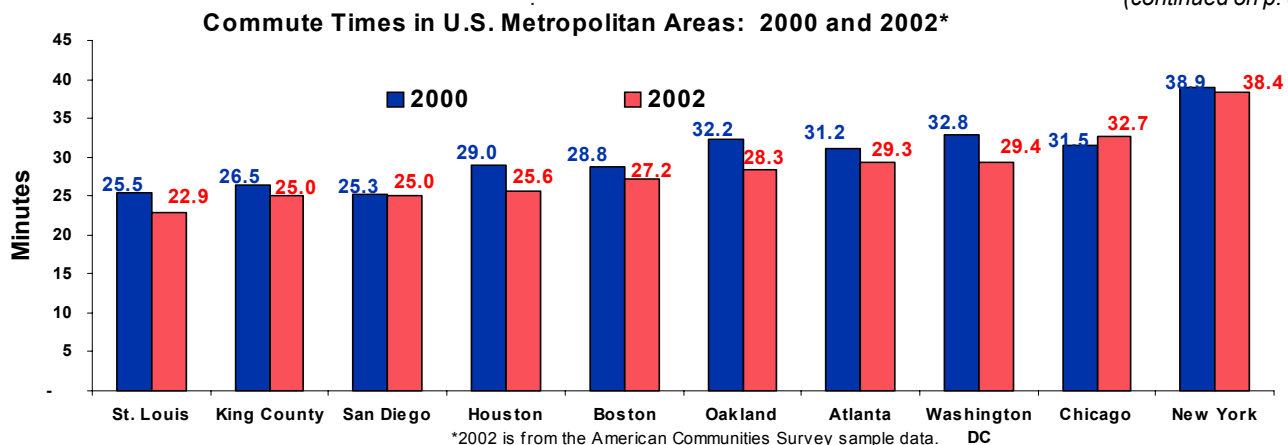
- The average commute trip for King County residents appears to have dropped from 26.5 minutes in 2000 to 25.0 minutes in 2002. Differences in measurement tools, however, may introduce a bias into this statistic, which could affect its reliability.
- With the exception of Chicago, commute times in most metropolitan counties appear to be slightly lower than reported in the 2000



Census. This may be due to a higher unemployment rate, or it may be due to seasonal differences between the American Communities Survey and the timing of the Census data collection.

- The average travel time to work for *King County residents* was lower than the commute times for many metropolitan counties in both 2000 and 2002.
- There was a sharp increase (9.5%) in average travel time to work for King County residents from 1990 - 2000. The rise was a more modest 5.2% during the 1980s.
- Recently-released 2000 Census data shows an average commute time of 30.4 minutes for all those who *work in King County*. This includes King County workers who commute from surrounding counties. This travel to work time is 2 - 3 minutes longer than it was in 1990.
- There are several reasons why the average commute time for all residents may have declined in the last two years. The most likely explanation is that with high unemployment and a sluggish economy, the total number of commuters on the roads has declined slightly, alleviating congestion. This explanation is supported by the data on transit ridership (see Indicator 42, Fig. 42.1 and 41.2) which has also declined during this same period.
- Another possible factor is people choosing to live closer to their place of work, or work closer to their place of residence. This results in shortened commutes for themselves, and alleviates traffic for others on the roads.

(continued on p. 3)



Indicator 41, continued

Heavily-Traveled Highway Commutes in King County						
Major Destination and Return Commute Trip	Average Travel Time at AM Peak		Average Travel Time at PM Peak		Total Commute Time at AM and PM Peak	
	2000	2002	2000	2002	2000	2002
Tukwilla to Bellevue am Bellevue to Tukwilla pm I-405	23	30	27	25	50	55
Seattle to Bellevue am Bellevue to Seattle pm Over SR-520	17	18	20	22	37	40
Bellevue to Seattle am Seattle to Bellevue pm Over SR-520	15	17	19	18	34	35
Seattle to Bellevue am Bellevue to Seattle pm Over I-90	13	16	20	22	33	38
Auburn to Renton am Renton to Auburn pm SR-167	12	15	21	19	33	34

- On the other hand, data on total vehicle miles traveled seems to indicate that as a County we are driving about the same number of miles as in 2000. It may be that the leveling of miles traveled, coupled with road improvements and better incidence-response procedures are resulting in less congestion-related delay than in 2000.
- While King County's overall commute times have declined slightly from 2000 to 2002, travel times on the busiest highway routes seem to have increased slightly.
- All of the morning peak commutes were longer in 2002 than in 2000, while three out of five evening peak commutes were shorter.
- For round-trip commute times on the same route, three out of the five routes show an increase of over 2 or more minutes, while two of the routes show an increase of just one minute.

Outcome: Increase the Use of Modes of Transportation other than Single Occupancy Vehicles
Indicator 42: Public Transit Ridership



Countywide Planning Policy Rationale

"All jurisdictions in the County, in cooperation with METRO, the Metropolitan Planning Organization [Puget Sound Regional Council], and the State, shall develop a balanced transportation system...(FW-19)

"The countywide transportation system ...shall be a multi-modal system....[which] shall include the following: a. an aggressive transit system, including high-capacity transit; b. high occupancy vehicle facilities;...g. non-motorized facilities; and h. freeways, highways, and arterials." (T-1)

"Each Urban Center will be providing for a minimum of 15,000 jobs and should be served by high-capacity transit.... All jurisdictions that would be served by high-capacity transit shall plan for needed high-capacity transit rights-of-way, stations and station supportive transportation facilities and land uses in their comprehensive plans.... (T-5)

"To encourage transit use, jurisdictions should establish mechanisms to limit the use of single-occupancy vehicles for commuting purposes...All plans for Urban Centers shall encourage bicycle travel and pedestrian movement." (LU 44)

"Mode-split goals and measures of mobility for transit, ridesharing and non-motorized travel shall be established by local jurisdictions and METRO."

Key Trends

Transit Ridership

- Metro transit ridership, which includes riders on the Sound Transit Express buses, dropped about 3.4% from 2001 to 2002, following a 2% drop in 2000. Metro ridership per capita was down to 54 trips per year, from a high of 58 in 1999 and 2000. This matches the rate in 1997.
- Most of this drop can be explained by the high unemployment rate during these two years. Fig. 42.2 shows the very close correlation between the number of jobs per capita in King County, and the number of annual bus rides per capita.
- When employment drops, so does transit ridership. Public transit ridership may also have been affected by cutbacks on certain routes due to loss of vehicle tax revenue since 2001.
- Preliminary estimates, based on 2003 quarterly reports, indicate that ridership has stabilized in 2003, and will be about the same as in 2002.

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Fig. 42.1

Annual Passenger Boardings on Metro-Managed Transit, Community Transit, and Sound Transit						
	1995	1997	1999	2000	2001	2002
Metro Managed Transit*	81,657,696	88,926,696	97,127,919	100,814,820	98,827,969	95,319,400
Community Transit Serving King County**	data not available			1,928,928	1,941,291	1,853,789
Sounder Commuter Rail***	Service Began in September 2000			102,552	562,740	672,495
Total				102,846,401	101,332,099	97,845,779
*Metro-Managed Transit includes Metro buses and Sound Transit Express Buses.**This includes Community Transit Routes serving suburban King County to the University of Washington and Bellevue to Downtown Seattle. ***Sounder Rail includes all passenger boardings on the Tacoma to Seattle route, some of which originate outside of King County.						

Fig. 42.3

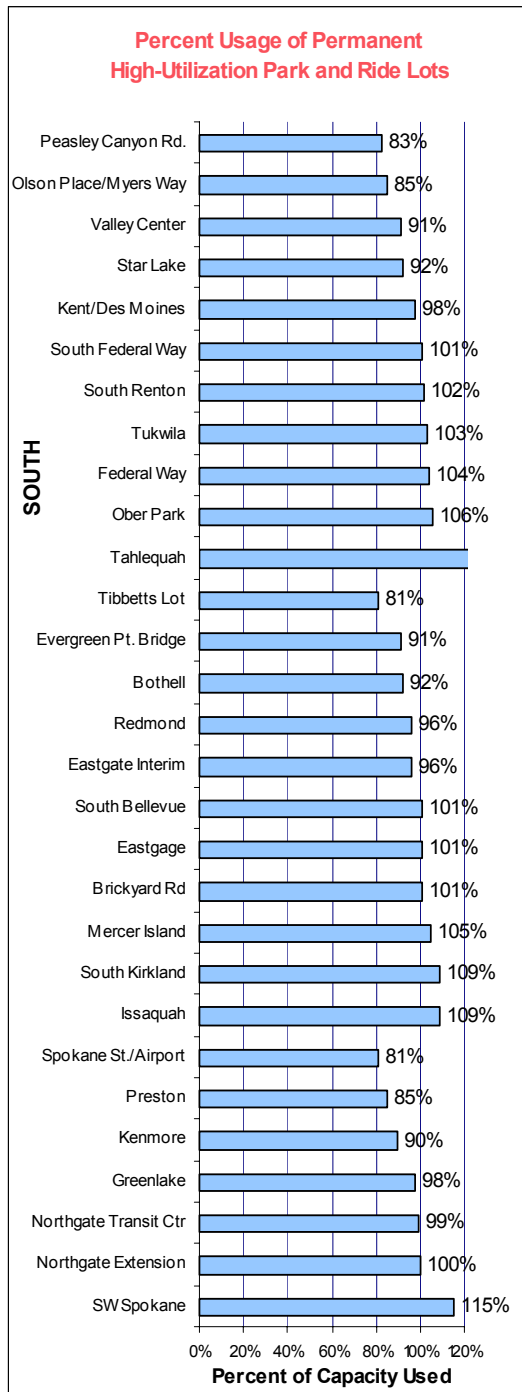
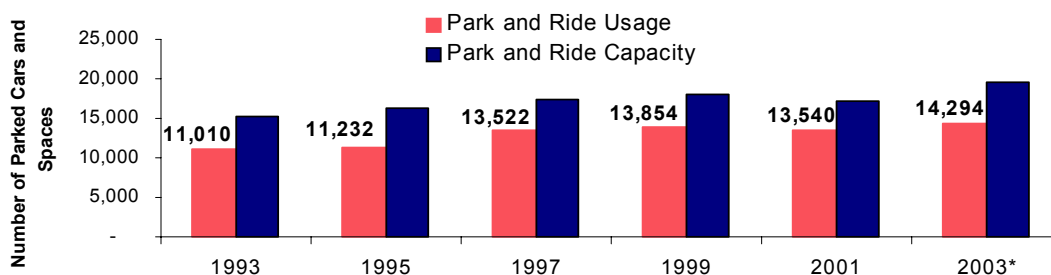


Fig. 42.3

King County Park and Ride Usage and Capacity: 4th Quarter 1993 - 2003

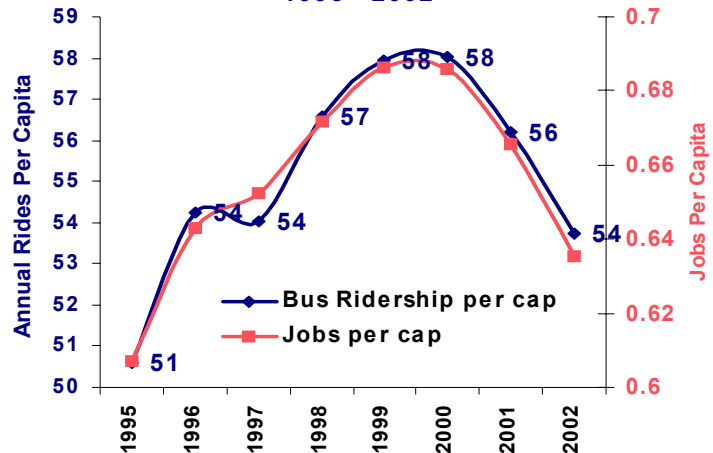


* 2003 data is for 2nd quarter rather than 4th quarter.

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Fig. 42.2

Annual MetroTransit Ridership Per Capita Compared to Number of Jobs Per Capita: 1995 - 2002



- When Metro transit ridership is combined with riders on Community Transit routes serving King County, and with passengers using Sounder commuter trains, an average of over 100 million rides are being supplied each year by the public transit system serving King County.
- This amounts to about 58 rides per person per year. This total does not include ferry ridership.

Park and Rides

- The convenience of using public transit is enhanced by the availability of sufficient stalls in public park and ride lots. There has been a 30% increase in park and ride capacity and a 30% increase in usage since 1993.
- In 2003, King County had 19,660 park and ride stalls, of which an average of 14,300 were used daily.
- Average percent usage has varied over the last 10 years, from a low of 68.6% in 1995 to a high of 78.6% last year. The average usage over the decade has been about 75%. Some excess of capacity over usage is necessary to assure that there will be sufficient room on the highest demand days and in the highest demand lots.
- Fig. 42.4 shows the percent usage in the highest demand permanent lots (as opposed to leased lots). Many of these lots are regularly over capacity, discouraging any increase in usage. (Usage over 100% ordinarily means cars parked adjacent to the park and ride lot, or using other spaces that are not considered park and ride stalls.)

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What We Are Doing

- Increasing park-and-ride stalls and usage.
- Launching an innovative car-sharing program known as "Flexcar" to cut down on the number of single-occupancy vehicles (SOV) trips.
- Creating agreement between regional transit providers to accept each others' transfers, and creating a "smart card" for easy use on seven public transportation agencies.
- In 2001, adding an additional 115,000 annual hours of transit service, mainly to Eastside King County.
- Instituting web-based trip planning and transit pass purchase.
- Offering special bus service to all major sporting venues in King County
- Inaugurating and rapidly increasing ridership on Sounder commuter trains.
- In 2003, contracting for 235 new hybrid diesel-electric buses for Metro and Sound Transit, which will cut down on diesel-fuel emissions.
- Completing first transit-oriented housing development in Overlake; completing and planning for similar developments in other urban centers.
- Creating the Bellevue Trip Reduction Incentive Program to provide cash rewards to businesses whose employees reduce SOV commutes.
- Proceeding with funding, and implementation of the Sound Transit Light Rail System linking SeaTac, Tukwila, downtown Seattle and the U.W.
- Moving forward on a monorail system to link Ballard, downtown, and West Seattle.

Outcome: Increase the Availability and Use of Modes of Transportation other than Single Occupancy Vehicles

Indicator 43: Percent of Residents who Walk, Use Transit, Bicycle, or Carpool as Alternatives to the Single Occupancy Vehicle



Countywide Planning Policy Rationale

"The land use pattern shall be supported by a balanced transportation system which provides for a variety of mobility options...[including] a high capacity transit system which links the Urban Centers and is supported by an extensive high-occupancy vehicle system, a local community transit system for circulation within the Centers and to the non-center Urban Areas, and non-motorized travel options." (FW-18)

"To encourage transit use, jurisdictions should establish mechanisms to limit the use of single-occupancy vehicles for commuting purposes. Such mechanisms could include charging for long-term single-occupancy vehicle parking and/or limiting the number of off-street parking spaces for each urban Center...[and] developing coordinated plans that incorporate Commuter Trip Reduction guidelines." (LU-44)

"The transportation element of Comprehensive Plans shall include pedestrian and bicycle travel as part of the transportation system and be developed on a coordinated, regional basis. The bicycle and pedestrian element shall be a part of the funding component of the capital improvement program." (T-7)

"Mode-split goals and measures of mobility for transit, ridesharing and non-motorized travel shall be established by local jurisdictions and METRO."

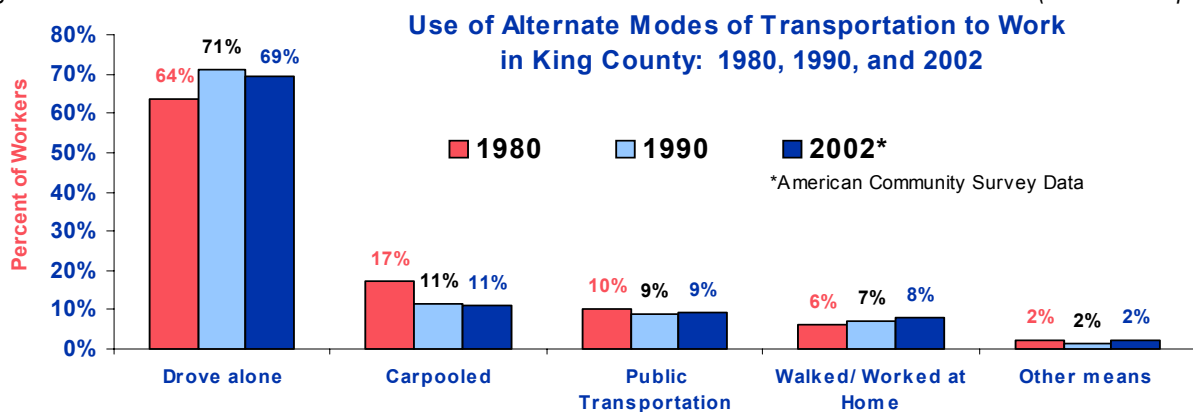
Key Trends

Work Trips

- 69% of workers still commute to work via single-occupancy vehicles (SOVs). This is a higher percent than in 1980, when 64% commuted by SOV. It is slightly lower than the 71% who traveled to work by SOV in 1990.
- The most significant change in modes of commuting during the last decade has been an increase of those who walk to work, or who work at home, from 6% in 1990 to 8% in 2002. There has also been a slight increase in those who use other means, such as bicycling, to get to work. Use of carpools and public transportation has stayed about the same, as a percent of all commute trips from 1990 to 2002. However, it appears that in contrast to 1980, there has been a shift back to SOVs from carpools in the last two decades.

Fig. 43.1

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Non-work Trips

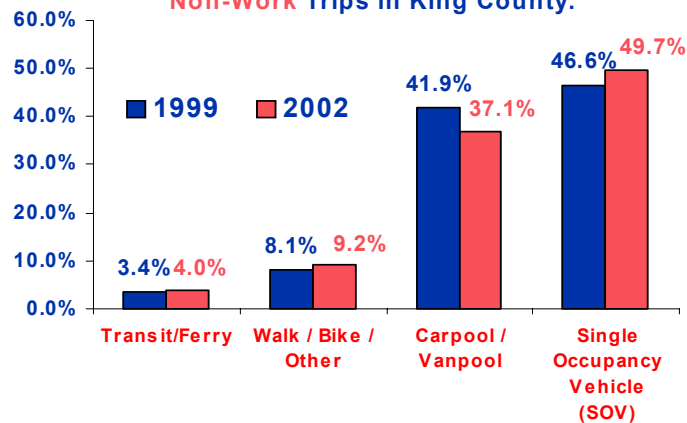
- Very different modes of travel are used for non-work trips than for work trips in King County. It is much more common to have one or several passengers in the car (e.g. children or other family members) for non-work trips than for commuting to work.
- Fig. 43.2 shows the changes in non-work trips from 1999 to 2002, based on the Puget Sound Regional Council's Transportation Panel Survey.
- SOV trips account for nearly 50% of non-work travel, up from about 47% in 1999. There has been a proportionate decrease in carpool trips.
- On the positive side, use of public transit, walking, and biking or other modes, for non-work trips is higher in 2002 than it was in 1999. Combined these modes have increased from 11.5% of all trips to 13.2%.

What We Are Doing

- Improving and extending bicycling paths and lanes to make it easier for cyclists to commute to work as well as improving recreational opportunities.
- Encouraging residential development in urban centers and in closer proximity to public transit and to major work sites to promote commuting and shopping without use of SOVs.
- Providing cash incentives to local businesses whose employees eliminate their own single-occupancy vehicle commutes.
- Working with teens from Sammamish and Issaquah on a public education campaign known as "Move It", to help the community explore alternatives to driving alone in a car.
- Working with the Puget Sound Regional Council, state, local and adjacent county agencies to develop a comprehensive and affordable transportation plan for the next 20 - 30 years.
- Developing commuter rail, light rail and monorail projects to provide efficient affordable alternatives to car commuting, and alleviate highway congestion.

Fig. 43.2

Alternate Modes of Transportation for Non-Work Trips in King County:



This data is from the PSRC's 1999 and 2002 Transportation Panel Survey. Non-work trips are not tracked by the Census. The Panel Survey is a limited sample, and thus, is less reliable than full census data.



Freight and Goods Transportation Systems Map: 1999

Freight Tonnage Class*
T-1 (over 10,000 tons)
T-2 (4,000 - 10,000 tons)
T-3 (300 - 4,000 tons)
*Annual Tons of Freight
(in thousands of tons)

I-5 @ NE 185th

SR-522 @ Woodinville

SR-18 @ Auburn

Map by David Ko
King County ORPP

Outcome: Improve Ability of Goods and Services to Move Efficiently and Cost-Effectively Through the Region



Indicator 44: Amount of Congestion Affecting Commercial and non-Commercial Traffic

Fig. 44.1 Volume Capacity Ratio for I-5 at N.E. 185th: 1995, 1999, and 2002

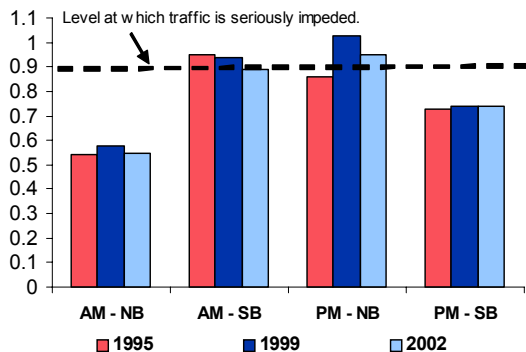


Fig. 44.2 Volume Capacity Ratio for SR 522 from NE 195th St. to SR 9: 1995, 1999, and 2002

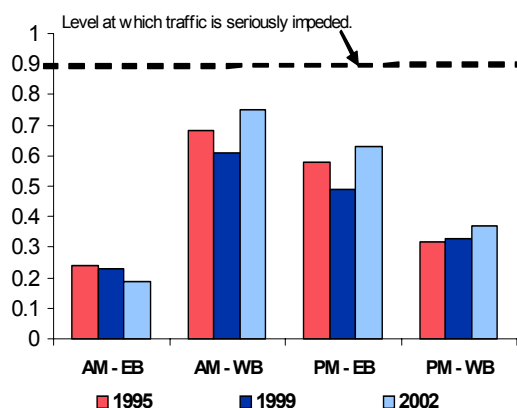


Fig. 44.3 Volume Capacity Ratio for SR 18 from SR 164 to the Auburn - Blk. Diamond Rd.: 1995, 1999, and 2002

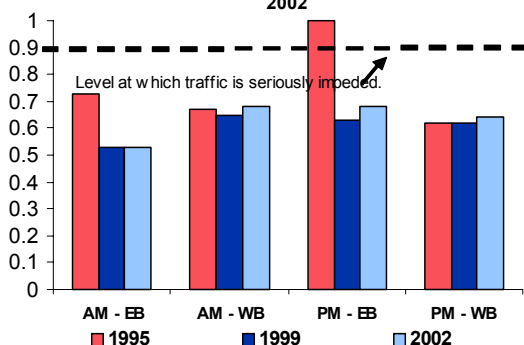


Fig. 44.4

Key to Volume / Capacity Ratios

- .5 - .75 Travel speed still at or near free flow, but ability to maneuver within the traffic stream is noticeably restricted.
- .75 - .90 Travel speeds begin to decline with increasing flows; minor incidents expected to cause queuing.
- .90 - 1.0 Operation at or near capacity and therefore volatile because there are virtually no usable gaps in the traffic stream; maneuverability is extremely limited.

Countywide Planning Policy Rationale

"In recognition of the fact that King County is a regional freight distribution hub and a major international trade gateway, and that freight transportation is one of the state's most important basic sector economic activities, goods mobility by all modes shall be included as a component of comprehensive plans." (FW-20) "In order to maintain regional mobility, a balanced multi-modal transportation system shall be planned that includes freeway, highway and arterial improvements by making existing roads more efficient. These improvements should help alleviate existing traffic congestion problems, enhance high-occupancy vehicle and transit operations, and provide access to new desired growth areas....General capacity improvements promoting only single-occupant vehicle traffic shall be a lower priority." (T-8)

Key Trends

Congestion: Volume-Capacity Ratios

- There has been a slight decrease in the amount of congestion affecting both cars and trucks on Interstate 5, but modest increases in peak hour traffic volumes on two other major King County commute routes.
- While there has been a stabilization in per capita vehicle miles driven, there are still more total miles being driven on streets and highways in King County than in 1999. (See page one "As King County Grows..." and Indicator 41).
- As employment levels return to normal, more congestion can be expected unless further capacity is added, or commuters choose alternative means of transportation.
- A volume-capacity ratio measures how the volume of actual traffic compares to the road's capacity. At a ratio of 1.00 traffic would be at maximum capacity with no gaps in the traffic stream and therefore very little maneuverability. (See Fig. 44.4).
- A volume-capacity ratio of .9 means that traffic is nearly at the limit of the highway's capacity, so that speeds will decline, and even minor accidents will cause major delays. Traffic can flow freely at maximum legal speed when the volume-capacity ratio is around .5 or below.
- On I-5 at N.E. 185th St., just south of the King-Snohomish County border, the volume-capacity ratio at peak commute times has declined slightly since 1999, particularly for the morning south-bound commute and the evening northbound commute. There has been no change in the evening southbound commute.
- However, the volume-capacity ratio remains at or above .9 for the morning southbound commute (towards downtown Seattle) and the evening northbound commute (towards Snohomish County).
- On SR 522 near Woodinville peak traffic volume-capacity ratios have risen since 1999 on all except the morning eastbound commute.
- The morning westbound commute and the evening eastbound commute have risen considerably, although they remain in the .6 to .7 range. At that volume-capacity level, the free flow of traffic is beginning to be restricted.

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- On SR 18 in Auburn, the volume capacity levels have risen very slightly since 1999. However, both the morning and the evening eastbound commutes have dramatically improved since 1995, due to capacity improvements between 1995 and 1999.
- As with SR 522, volume capacity ratios are generally in the .6 to .7 range at peak commute times, except for the morning eastbound commute which is just over .5.

Change in Commercial (Truck) Traffic

- Growth in the Puget Sound economy brings more commercial traffic through King County in addition to more personal and commute trips.
- As Figs. 44.5 and 44.6 show, truck traffic has increased faster than car traffic over the last seven years, rising from an average of about 5.2% on major King County highways in 1994 - 1995, to 7.6% in 2001 - 2002.
- The greatest increase in average daily truck traffic - over 78% in seven years - has been on SR 522 (Woodinville area), with SR 18 (Auburn area) increasing 78% and I-405 (south Bellevue) increasing 71%. At this rate of increase, truck traffic will have doubled on those routes in 10 years.
- Significantly, truck traffic on those three routes has increased six to ten times as fast as the increase in car traffic.
- On I-5 and SR 167, truck traffic has increased by 32% and 36% respectively, while car traffic increased 10% and 22%.



- As Fig. 44.6 illustrates, despite the dramatic increase in commercial traffic on King County's major highways over the past seven years, commercial vehicles - at 7.6% of all traffic - remain a relatively small proportion of the total.

Fig. 44.5

Increase in Annual Average Daily Traffic (AADT) by Cars vs. Trucks over Seven-Year Period

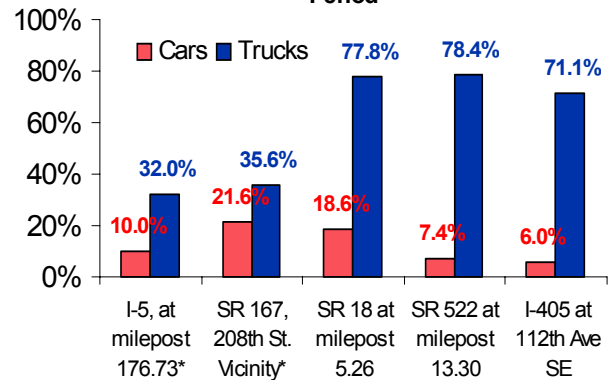
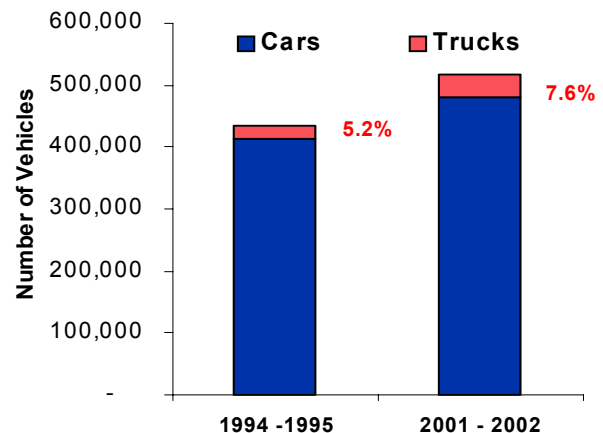


Fig. 44.6

Trucks as Percent of All Vehicles on Five King County Highways*



This is an aggregate of annual average daily traffic on I-5, I-405, SR 522, SR 167, and SR 18

King County Growth Management Planning Council Members

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Outcome: Protect and Improve Transportation Infrastructure

Indicator 45: Number of Lane Miles of City, County, and State Roads and Bridges in Need of Repair and Preservation



Countywide Planning Policy Rationale

"Transportation elements of Comprehensive Plans shall reflect the preservation and maintenance of transportation facilities as a high priority to avoid costly replacements and to meet public safety objectives in a cost-effective manner." (T-16) "Infrastructure planning and financing shall be coordinated among jurisdictions to direct and prioritize Countywide facility improvements" (FW-21)

Background

- King County jurisdictions use a variety of different pavement management systems, including different software and different visual inspection methods to monitor the condition of roads.
- In the jurisdictions reporting, three systems seemed to predominate, and nearly all use a 100 point scale to indicate road condition. (See example of Overall Condition Index [OCI] scale below)

Fig. 45.1

OCI Score	Intervention Needed by Class of Road	
	Arterial & Collector	Residential
70-95	Crack Sealing	Crack Sealing
50-69	Class B 2-inch Overlay	Class G 1-inch Overlay
26-49	Class B 2-inch Overlay	Class G 1-inch Overlay
0-25	Reconstruction	Reconstruction

Fig. 45.2

Summary of Lane Miles of County and City Roads in King County in Need of Overlay, Repavement or Reconstruction: 2004 - 2005*

Score to Identify Segments for Overlay, Repaving, or Reconstruction	Total Lane Miles Reported	Lane Miles In Need of Repaving/ Rehab.	Percent of Total Lane Miles in Need of Repavement / Rehab.	Lane Miles Currently Budgeted for Repave or Rehab.	Percent of Need Being Met (by Lane Miles)	Est. Cost per Lane Mile (Average)*	Percent of Need Met (by cost)
Average for Jurisdictions: < 60 on 100 pt. scale	6,921	667	9.6%	477	71.5%	\$ 90,831	71.3%

*Based on reports from Unincorporated King County and 11 cities. Although this is a limited sample of King County jurisdictions, it represents most of the mid-sized cities, and covers at least 1/2 of the urban area of the County and all of the rural area. It is most likely typical of the condition of road infrastructure in the remaining suburban jurisdictions. The lane mile values are totals for the 12 jurisdictions reporting, not for the whole County.

Background (cont.)

- Generally, an arterial or collector road with a rating below 50 or 60 on a 100 point scale is in need of overlay or repavement. For residential streets the standard may be lower. Once a road's condition declines below a score of 25 major reconstruction will be needed, and that is much more expensive per lane mile.
- The need to avoid such expensive reconstruction is the incentive to repair roads in a timely fashion rather than to defer needed overlay and repavement beyond the point of "lowest life cycle cost".
- Cities have considerable leeway in how they trade off routine maintenance needs with major repair needs. However, when roads that are approaching a "poor condition" are not maintained and repaired because of current budget constraints, unnecessarily high costs may result in the long term..

Key Trends

- Based on reports from 12 jurisdictions, it appears that about 10% of the lane miles in King County have received a condition rating which signals the need for overlay, repavement, or complete reconstruction.
- Of the lane miles in need of some form of major rehabilitation, there are current plans to repave or reconstruct about 71% of them. This means that approximately 29% of the need is being deferred, usually due to budget limitations.
- In terms of dollars budgeted, jurisdictions also estimate that their current budgets cover about 71% of the major rehabilitation needed.
- The Washington State Supreme Court's recent decision upholding the constitutionality of Initiative 776 has resulted in King County no longer being able to collect the local option Vehicle License Fees (\$15) which were an important source of revenue to the county's road improvement program. As a result approximately \$105 million worth of project have had to be cut, and budgeting for current needs is uncertain.
- At the state level, about 9% of the roads were determined to be in "poor condition", i.e., in need of major rehabilitation in 2001. That was up from about 6% in 2000, indicating a growth in the backlog of state roads in need of major repair. The state is also experiencing major shortfalls in transportation revenues due to recent legislation.

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Fig. 45.3

Lane Miles of County and City Roads in Need of Overlay, Repavement or Reconstruction: 2003 - 2005										
	Rating System Used	Score to Identify Segments for Overlay, Repaving, or Reconstruction	Total Lane Miles	Lane Miles In Need of Repaving/Rehab.	Percent of Total in Need of Repavement / Rehab	Lane Miles Currently Budgeted for Repave or Rehab.	Percent of Need Being Met (by Lane Miles)	Est. Cost per Lane Mile	Amount Budgeted	Percent of Need Met (by Cost)
Uninc. King County	PCS (County Pavement Mgt. System)	<50	3,602.0	345.0	9.6%	291.1	84.4%	\$ 50,000	\$ 16,409,000	95.1%
Bellevue	OCI (Overall Condition Index)*	<50, <30	954.3	77.5	8.1%	71.0	91.6%	\$ 107,265	\$ 8,313,000	100.0%
Burien	OCI (Overall Condition Index)	<70	186.0	12.0	6.5%	8.0	66.7%	\$ 83,333	\$ 600,000	60.0%
Issaquah	OCI (Overall Condition Index)	<60	175.0	11.7	6.7%	5.9	50.0%	\$ 104,949	\$ 664,000	54.0%
Kent	PMS (Pavement Mgt. Software)		541.9	40.0	7.4%	16.4	41.0%	\$ 65,713	\$ 1,086,500	41.3%
Kirkland	MTC PMS (Pavement Mgt. Software)		311.8	50.0	16.0%	25.0	50.0%	\$ 80,000	\$ 3,000,000	75.0%
Mercer Island	Pavement Condition Rating	<60	159.4	20.5	12.9%	6.1	29.5%	\$ 195,122	\$ 2,000,000	50.0%
Milton (KC portion only)**			6.6	2.9	43.7%	1.17	40.6%		\$ -	
North Bend***	WSDOT	<50	48.9	15.1	30.8%	0.9	6.0%	\$ 109,489	\$ 650,000	39.4%
Redmond****	PMS (Pavement Mgt. Software)	<70, <60	304.2	26.0	8.6%	23.7	91.0%	\$ 84,400	\$ 2,200,000	27.5%
Renton	OCI (Overall Condition Index)	<70	450.7	29.0	6.4%	9.0	31.0%	\$ 75,862	\$ 1,260,000	57.3%
SeaTac	OCI (Overall Condition Index)	<60	180.6	37.2	20.6%	18.6	50.0%	\$ 43,011	\$ 800,000	50.0%

*Several of the cities use the Centerline Software from Measurement Research Corporation. OCI is the rating scale used.

**There is a 1.17m section of 5th Ave in Milton still owned by WSDOT. There are tentative plans for WSDOT to repave it before turning it over to the City.

***The budgeted amount includes a \$450,000 grant for reconstruction of a .26 lane mile segment, plus \$200,000 for overlay on .64 lane miles.

****There is a deferred maintenance need of about \$8,000,000. The current allocation (\$3,200,000) includes \$2,200,000 for the current pavement management program and bridge needs, and an additional \$1,000,000 in CIP funds.

Key Trends (cont.)

- There is considerable variation among the reporting jurisdictions in the degree to which they are able to complete major rehabilitation or repavement as soon as the need is evident. In terms of the estimated cost of fully meeting current need, cities range from meeting only about 40% of the cost to covering 100% of the cost. The average for the jurisdictions reporting is about 71%.
- There are also large differences in the estimated cost per lane mile among the jurisdictions. Much of this difference has to do with the number of miles that need complete reconstruction, which is far more costly, compared to regular re-paving or overlaying.
- Years of deferral of repaving is likely to lead to the need for much more expensive reconstruction projects, and consequently a higher cost per lane mile. When only repaving is needed the cost generally falls in the \$50,000 to \$80,000 range.

The **King County Countywide Planning Policies Benchmark Program** is a program of the Metropolitan King County Growth Management Planning Council. Reports on the 45 Benchmark Indicators are published annually by the King County Office of Budget. A companion to these reports is the **King County Annual Growth Report**. All reports are available on the Internet at <http://www.metrokc.gov/budget/>. For information about the **Benchmark Program**, please contact Rose Curran, Program Manager (206) 205-0715, or e-mail: rose.curran@metrokc.gov. The Benchmark Program address is King County Office of Budget, Room 406, King County Courthouse, Seattle, WA 98104.

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Repairing roads in King County

Highlights (continued from page one)

- It is likely that transit ridership has stabilized in 2003, as the economy begins to recover, and that it will soon be on the rise again. Particularly encouraging has been the rapid growth of ridership on the Sounder Commuter Rail since its inauguration in September of 2000. Most recently it has expanded its service to include the Everett to Seattle roundtrip route.
- The capacity of park and ride lots in King County has grown by over 3,000 stalls over the past 10 years, and usage continues to rise with available space. This trend enhances the attractiveness of commuting by transit for many riders.
- Growth in vehicle miles traveled is just about keeping pace with growth in population. This means that while more total miles are being driven on King County roads than in 1995, the per capita level is about the same.
- Single-occupancy vehicle trips, as the primary mode of commuting to work, have decreased from 71% to 69% since 1990.
- Over the past decade the most significant change in modes of commuting to work has been an increase in the percent of those who walk to work, or work at home - from just 6% of the total in 1990 to 8% in 2002.

- There has also been a very small increase in those who use other means of getting to work, such as bicycling.
- Peak hour congestion has declined slightly on I-5 north of Seattle, but the commute southbound in the morning and northbound in the evening remains near to maximum capacity, with very restricted traffic flow.
- Although commercial vehicles such as trucks remain less than 8% of total vehicle traffic in King County, commercial traffic is increasing at a much faster rate than car traffic.
- Most King County jurisdictions are making serious efforts to manage road maintenance and rehabilitation in a systematic and timely fashion, and to catch up on previously deferred repairs. However, about 29% of roads currently needing major repair are still being deferred due primarily to budget constraints.

Same Benchmarks, New Format

The King County Benchmark Program is in its eighth year of publishing an annual report on progress in meeting the Countywide Planning goals. This year it comes to its readers in an experimental format, which will be evaluated in mid-2004. It will consist of five issues, of which this is the fourth. The Land Use Indicators were published in August, the Economic Development Indicators were published in October, and the Affordable Housing Indicators in December. The Environmental Indicators will follow in April-May of 2004. All published Benchmark Reports are available on the web at www.metrokc.gov/budget/benchmrk.

Data Sources

Indicator 41: Average Commute Lengths

Data Source: *Decennial Census 2000, 1990, 1980. American Community Survey (ACS), 2000 and 2002.* The Census data reflects commute times during the week previous to the census-taking, i.e. late March. The ACS reflects an average year-round commute time. Puget Sound Transportation Panel Survey, 1990, 1993, 1996, 1999 and 2002, conducted by the Puget Sound Regional Council; Washington State Department of Transportation.

Indicator 42: Metro Transit Ridership

Data Source: *Metro Transit General Manager's Quarterly Report, Metro Transit Division. PSRC Puget Sound Trends April 2002.* The Washington State Employment Security Department.

Indicator 43: Percent of Residents Who Use Alternatives to Single-Occupancy Vehicles

Data Source: *Decennial Census of Population: Table DP-3. Profile of Selected Economic Characteristics: 2000, 1990 and 1980.* Seattle Times article, June 8th 2002. Puget Sound Transportation Panel Survey, 1999 and 2002, conducted by the Puget Sound Regional Council. PSRC's Transportation Panel Survey is roughly comparable from year to year, but the sample is limited in size, and

small changes may not be statistically significant. New panel participants are chosen to match panel participants who drop out. In order to assure an adequate number of transit-users for statistical significance, there is a slight bias in favor of transit-users. This means that the mode split in the panel survey is not comparable to the mode split reported by the Census.

Indicator 44: Ability of Goods and Services to Move Efficiently

Data Source: Washington State Department of Transportation.

Indicator 45: Number Lane Miles of City, County and State Roads and bridges in Need of Repair and Preservation

Data Source: King County D.O.T. Roads Division; Public Works Departments of King County Cities; Washington State D.O.T.